



National Aeronautics and
Space Administration
Lyndon B. Johnson Space Center
Houston, Texas



total health

Fitness challenge

The 1996 Fitness Challenge kicks off today and JSC's fitness staff is available to help fight body fat. Story on Page 3.



Returning to Mir

STS-76 astronauts check out equipment in preparations for *Atlantis*' return to the Russian outpost. Photo on Page 4.

Space News Roundup

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White Sands earns Gore's Hammer award

By James Hartsfield

White Sands Test Facility will be recognized for exceptional progress in reinventing government with the presentation of a Hammer Award from Vice President Al Gore's National Performance Review at 8:30 a.m. Monday, at South Shore Harbour.

WSTF has become one of the first government and industry partnerships in the world to become certified under the rigorous program of international quality control standards by the International Standards Organization. The Quality System Standards of ISO 9001, will greatly enhance the facility's preeminence in the international aerospace marketplace. The

ISO 9001 principles encompass management responsibilities, customer relations, design, calibration and testing, and they designate a common framework for production and service corporations throughout the world.

"It is just common sense that these standards that provide high quality products for the world market are good enough for our government," said Bob Stone, project director of the National Performance Review.

WSTF received the certification in October 1995, and shares the certification with its contractor partners, headed by AlliedSignal's

Technical Services Corp. division at WSTF. Although other government agencies and private companies have received the certification, WSTF is the first joint government and industry certification, as well as the first NASA installation to be certified.

"This achievement by WSTF demonstrates NASA's and JSC's continuing dedication to obtain the highest quality performance," said JSC Director George Abbey. "They

are to be commended for leading the way." The Hammer Award will be presented to WSTF by Stone during the opening remarks



of the Fourth Annual Conference on Quality in the Space Industry, to be held in League City March 4-5. WSTF is located 20 miles north-east of Las Cruces and employs 59 NASA civil service personnel and a team of over 480 contractor employees. The facility performs sophisticated laboratory and field tests on rocket propulsion systems and materials in potentially hazardous environments such as high-pressure oxygen and exposure to high-energy chemical rocket propellants. WSTF was built in the early 1960's to support the Apollo Program, and it has performed a crucial role in the development and operation of every U.S. human space flight program since.



JSC photo by Mae Mangieri

ENGINEERS WEEK—Space Operations Director John O'Neill talks with fifth grade students in Ed Heilig's class at Bales Intermediate School in Friendswood. O'Neill, along with more than 200 other JSC engineers, volunteered his time last week to reach out to students during National Engineer's Week.

Tethered satellite breaks away from Columbia's bay

By Karen Schmidt

Experiments performed during deployment operations of the Tethered Satellite System were surpassing scientists' expectations when the tether broke Sunday, slinging the satellite away from *Columbia*.

"We got a lot of information on tether dynamics," said Lee Briscoe, Mission Operations representative. "We learned a lot about deploying tethered satellites and we were able to verify our deployment models and procedures work."

During deployment, TSS scientists collected data on a variety of experiments including the generation of electrical current. Tether voltages as high as 3,500 volts were developed and scientists said the TSS could produce more power than they originally thought. Scientists operating electron generators obtained current

levels nearly 200 times greater than on STS-46.

"We have a lot of data in the bank from the satellite experiments," said Bob McBrayer, TSS mission manager at Marshall Space Flight Center. "There were a lot of happy people because we had science instruments that were rock solid and giving out a lot of data. The deployment was essentially smooth and the science data was more than we expected in a number of areas."

The satellite broke away from *Columbia* about 7:30 p.m. CST Sunday as it was nearing the full extent of its 12.8 mile deployment. The tether had been switched to a passive mode and there was no electrical current flowing at the time of the break. Lead Flight Director Chuck Shaw said Commander Andy

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Low, Meade leave to pursue aerospace careers

By Kyle Herring

Astronauts David Low and Carl Meade have left the astronaut corps to pursue other aerospace careers.

Low left NASA Feb. 20 and will join Orbital Sciences Corporation's Launch Systems Group in Dulles, Va. Meade left at the end of the month and will join Lockheed Skunk Works in Palmdale, Calif., as the X-33 deputy program manager. The project is an effort between civil aerospace companies and NASA to develop a potential next-generation reusable launch vehicle.

Low became an astronaut in June 1985. He has held a variety of technical assignments including work on the remote manipu-

lator system extravehicular activity and orbiter test and checkout tasks at the Kennedy Space Center. In 1994 he served as the manager of the EVA Integration and Operations Office, and in 1995 he served as an assistant in the NASA Legislative Affairs Office where he worked with Members of Congress and their staffs to keep them informed about NASA's aeronautics and space programs.

A veteran of three space flights, Low has logged over 714 hours in space, including nearly six hours on a space walk. He was a mission specialist on STS-32 in 1990 when the crew successfully deployed the Syncom IV-F5 communications satellite. On STS-43 in

1991 crew members deployed the fifth Tracking and Data Relay Satellite. Low was the payload commander on STS-57 in 1993 and the primary objective of this flight was the retrieval of the European Retrieval Carrier satellite. During the mission Low, along with crew mate Jeff Wisoff, conducted a 5-hour, 50-minute space walk during which the EURECA communications antennas were manually positioned for latching.

Meade became an astronaut in July 1986. He has held a variety of technical assignments including verification testing of flight software in the Shuttle Avionics Integration Laboratory, crew escape flight tests, orbiter ground

egress tests and launch support duties, both at the Kennedy Space Center and at the Vandenberg Launch Site. Prior to STS-38 and after STS-50, Meade was the Astronaut Office representative to the Solid Rocket Booster Program and the Space Shuttle Main Engine Program at Marshall Space Flight Center.

A veteran of three space flights, Meade has logged over 712 hours in space. He served as a mission specialist on STS-38 in 1990 a Department of Defense operations flight, STS-50 in 1992 carried the first United States Microgravity Laboratory, and STS-64 in 1994 when Meade performed the first untethered space walk in 10 years.



Low



Meade

Two new incentives added to Careers Plus+ program

Employees eligible for retirement now have two more choices under the Careers Plus+ Retirement Incentives Program.

A totally new option—"Partners in Technology"—has been added and the existing "Partners in Education" option has been expanded to cover teaching positions in high schools. Like the other options in the Careers Plus+ program, only permanent JSC employees eligible for early or optional retirement may participate.

"Partners In Technology" encourages employees to take an active role in transferring NASA technology

to the private sector. Employees identify inventions or technologies with potential commercial applications and work through the Technology Transfer and Commercialization Office to obtain an exclusive license, normally a four to six month process.

If the license is approved, employees then immediately retire and work with a JSC sponsored "technology incubator" which provides assistance in writing a business plan, developing a marketing strategy, applying for venture capital

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Brian Duffy

Astronaut Duffy becomes new JSC associate director

JSC Director George Abbey has appointed veteran astronaut Brian Duffy associate director of the center, effective immediately.

Duffy will assist Abbey in the direction and management of JSC's resources, functions, and programs and projects assigned to the center.

Duffy received a Bachelor of Science in Mathematics from the United States Air Force Academy in 1975 and a Master of Science in Systems Management from the University of Southern California in 1981. He entered the Air Force in 1975 and joined NASA in 1985 as

an astronaut. He was the pilot of both STS-45 in March 1992 and STS-57 in June 1993, and the commander of STS-72 in January 1996. He has also served in numerous key management positions, including director of F-15 tests while in the Air Force, spacecraft communicator on several missions, and technical assistant to the director of Flight Crew Operations. Duffy has received numerous awards, including three NASA Space Flight Medals, the DoD's Superior Service Medal and Meritorious Service Medal, and the USAF's Commendation Medal.